

### **REMARKS**

This Amendment responds to the Office Action dated November 29, 2004. By way of this amendment, claims 1, 13 and 23 have been amended to more precisely define Applicants' invention. Accordingly, amended claim 1 and its associated dependent claims 2-12, amended independent claim 13 and its associated dependent claims 14-22, amended independent claim 23 and its associated dependent claims 24-25 and previously presented claims 26-32 are under consideration. Applicants submit that no new matter has been added and that the amendments to the claims will not subject an undue burden upon the Examiner to examine. Applicants further submit that the amended claims have placed the case in condition for allowance, and as such, respectfully request entry of the present after-final amendment.

Applicants are appreciative of the Examiner's allowance of claims 26-28 and comments regarding the allowability of the claims 2-7, 14-19, and 24 upon inclusion of the subject matter recited in the associated base claim and any intervening claims.

The current Office action, however, fails to address the status of claims 29-32, which were submitted with Applicants' previous response. Because these claims correspond to certain of the claims indicated as reciting allowable subject matter, Applicants respectfully request allowance of claims 29-32. Specifically, independent claim 29 was presented which incorporated the subject matter of original independent claim 1 and dependent claim 3. Dependent claim 30 is similar in subject matter to original dependent claim 4. Likewise, new independent claim 31 had been added and incorporated the subject matter of original dependent claim 14 into original independent method claim 13 and new independent claim 32 has been added to incorporate the subject matter of original dependent claim 15 into original

independent method claim 13. The appropriate claims fee was submitted with Applicants' previous response, and therefore these claims are properly pending in the current application. Applicants respectfully request allowance of claims 29-32 in view of the Examiner's continued indication that original claims 3, 4, 14, and 15 recite allowable subject matter.

### **35 U.S.C. 102(b) Rejections**

In the current Office action, claims 1, 8-13, and 20 have been rejected under 35 U.S.C. 102(b) as being anticipated by Warrior US 5,764,891. Applicants respectfully submit that the amendments to independent claims 1 and 13 have rendered the rejections under §102 untenable.

Specifically, independent claims 1 and 13 have been amended in similar fashion to recite field devices that communicate using a first or second communication protocol on a single digital data bus through a first or a second communications interface that is connected in *parallel* across the single digital data bus such that the first or the second communications protocol can communicate directly on the primary data bus. The claims are further amended to recite that the first or second communications protocol can communicate directly on the primary bus. Support for these amendments is found in Figure 2 and paragraphs [0030]-[0033] of the specification, where a field device is disclosed as supporting two communication protocols, HART® and Fieldbus, that are coupled in a parallel connection through independent communication interface circuits [58] and [60] to the digital data bus [30]. The claimed parallel connection advantageously provides an external interface to both protocols, thereby allowing the claimed field device and method to interface to external communication system(s) through a single digital data bus.

Quite the opposite, the cited prior art does not expressly or inherently describe Applicants' invention as now claimed. As correctly identified in the office action, Warrior does couple a first communications interface and a second communications interface adapted to process a first and a second protocol, but the first and second communication interfaces are not coupled in parallel to a digital data bus. One skilled in the art recognizes the teachings of Warrior place the respective interface circuits in a series connection. See Fig. 3; see also col. 3, lines 35-67 through col. 4, lines 1-37. This series connection teaches a first communications interface coupled to the second communications interface wherein the communications interfaces cooperatively function as a protocol translator. That is, Warrior's teachings are limited to processing inputs and outputs to Fieldbus. Warrior's teachings do not expressly or inherently provide communications to both the first and the second protocol.

Specifically, Warrior teaches a Fieldbus interface circuit [30] that is connected to the external process control loop [18] and that communicates to process control equipment using the first communication protocol. The second communications protocol communicates to the field device through the transmitter interface circuitry [34] through conversion circuitry [36] and an internal control loop [70]. One skilled in the art recognizes the connection between the two interface circuits as a series connection. This series connection taught by Warrior can only provide direct communications to the fielded device through a single protocol – namely Fieldbus. There are simply no teachings within Warrior to permit direct field device communication through a second protocol. Consequently, the fieldbus interface circuit disclosed by Warrior is limited to protocol conversion that yields single protocol communications external to the field device.

Under Section 2131, the MPEP states: "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single

prior art reference." *See Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631 (Fed. Cir 1987). Because Warrior fails to disclose each element of independent claims 1 and 14, the rejection of claims 1, 8-13, and 20 as anticipated by Warrior must be withdrawn.

### **35 U.S.C. 103(a) Rejections**

The Office Action further rejects claim 21-23 and 25 under 35 U.S.C. 103(a) as being unpatentable over Warrior in view of Applicants' Admitted Prior Art (AAPA). Applicants respectfully traverse these rejections.

As now amended, independent claims 13 and 23 include subject matter reciting a *first and second communications interface ...coupled in parallel to the primary digital data bus such that the first or the second communication protocol can communicate directly on the primary data bus*. It is not seen that the cited prior art discloses or suggests this subject matter.

With respect to the primary reference, as noted above Warrior fails to explicitly or implicitly suggest coupling in a parallel connection a first and a second communication interface to a single or primary digital data bus that permits either a first or second communications protocol to be used.

The alleged AAPA fails to supply the deficiencies in Warrior noted above. Specifically, the Office action asserts that Applicants have admitted the step of using a portable configuration tool proximate to the field device to send communications having the second protocol. Similar to Warrior, the alleged AAPA requires a series connection that converts the second protocol to the first protocol for communication through the bus. Accordingly, the alleged AAPA does not disclose or suggest a parallel connection that allows communication in the first or the second protocol directly on the primary data bus, as

specified in the claims. Consequently, the proposed combination of Warrior and the alleged AAPA fail to disclose or suggest each element of the claims, and the rejection based thereon must be withdrawn.

In addition, there is no motivation to combine Warrior with the alleged AAPA in the manner suggested in the Office action. In order to establish a *prima facie* case of obviousness, there must be a suggestion or motivation in the references themselves or in the knowledge generally available to one of ordinary skill in the art to modify the reference or to combine reference teachings. Applicants respectfully submit that there is no suggestion or motivation to one of ordinary skill in the art to combine the teachings of the cited references. The series communication network described in Warrior is functional only for the protocol translation scheme. The only implication of the teachings in Warrior is that HART® -based field device can be upgraded to the Fieldbus protocol. As understood by one of ordinary skill in the art, the secondary protocol described within Warrior cannot communicate on the primary bus –there is simply no physical or electrical connection to accomplish this function.

Applicants submit that the multiple protocol communication interface now claimed in the pending application is patentably distinct from Warrior and the alleged AAPA. As such, Applicants respectfully submit that claims 21-23 and 25 are allowable over the cited prior art.

## **Conclusion**

For the reasons stated above, Applicants submit that the specification and claims are in proper form and clearly define patentability over the prior art. Therefore, reconsideration of the application is respectfully requested. If the Examiner does not find that Applicants' claims are now in condition for allowance, Applicants respectfully submit that the foregoing remarks and amendments have placed the application in better form for appeal.

If, in the opinion of the Examiner a telephone conference would expedite prosecution of the subject application, the Examiner is invited to call the undersigned attorney.

Respectfully submitted,

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March 1, 2005